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LERNER, MARTIN	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/715,316	AGAPI ET AL.	
	Examiner	Art Unit	
	MARTIN LERNER	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 to 10 and 30 to 39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 to 10 and 30 to 39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/11/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 to 10 and 30 to 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Marx et al.* in view of *Zirngibl et al.*

Concerning independent claims 1, 30, and 39, *Marx et al.* discloses a method, system, and computer readable medium for developing interactive speech applications, comprising:

"presenting a [style-]selection menu that allows for selection of one or more catch [styles], each catch [style] corresponding to a system response to a catch event, wherein each catch [style] provides a different level of complexity with regard to preparing a system's audio response to be played in a dialog turn, the catch event comprising at least one event in which a user entry is not understood occurring during a dialogue turn, the event being selected from the group consisting of a user request for help, a non-input entry, and a non-matching entry" – Dialogue Module templates are provided as pre-packaged modules that can be used to create applications that have internally consistent software code (column 4, lines 33 to 36); dialogue modules are stored as graphically represented icons in a graphical display, in which icons for the

subset of dialogue modules are selected in the graphical display in response to user input; the interactive speech application is generated based upon the graphical representation (column 3, line 66 to column 4, line 15); a system comprises a plurality of Dialogue Modules, each designed for performing a specific dialogue task such as outputting a prompt, identifying the caller's speech as a recognized item of a predefined list, identifying a caller's speech as an affirmative or negative (Yes/No) response, or identifying strings of characters spelled by the caller (column 6, lines 42 to 48: Figure 4); by providing the interface, the Dialogue Modules 430 allow a developer to develop a Service 410 without a detailed understanding of the Speech Components, 440, 450, whose functions include outputting prompts to callers and receiving and processing input speech from callers (column 6, line 64 to column 7, line 3: Figure 4); Figure 7 shows how dialogue modules are selected from a list of on-screen icons, which is equivalent to "presenting a . . . selection menu that allows for selection"; each Dialogue Module performs a discrete task, and includes a value indicating its termination condition; termination conditions include SUCCESS, indicating a successful completion of a dialogue task, TIMEOUT, indicating that the caller did not respond within a predetermined timeout period, and ERROR, indicating that the system could not recognize the caller's response (column 8, lines 19 to 31); thus, broadly, a "catch event" corresponds to a termination condition of a TIMEOUT ("a non-input entry") or ERROR ("a non-matching entry"), where the system could not recognize the user response within a predetermined timeout period ("at least an event in which a user entry is not understood occurring during a dialogue turn, the event being selected from the group

consisting of . . . a non-input entry, and a non-matching entry"); Dialogue Module templates include error recovery methods when the Service does not collect a response from the caller during the timeout period; at least three "styles" of default error recovery procedures are disclosed: (1) retry by the same method, where a user is prompted again with the same prompt for a maximum number of times, (2) an apology prompt method, where a user is prompted with an apology, and prompted to repeat an answer now, and (3) a fallback method where a user is requested to spell a response or enter through touch-tone keys (column 13, lines 10 to 67: Figure 6: Steps 640, 650a, and 660); Dialogue Modules are provided in a Baseline Configuration library of default settings, including standard parameters, which can be customized (column 17, lines 5 to 34: Figure 8); a retry method with a reprompt represents a relatively simple audio response, of repeating, "Please say your answer now", while a fallback method is a relatively more complex request for a user to spell his or her response (column 13, lines 23 to 67: Figure 6: Steps 640a and 640b); similarly, Error Recovery options include relatively simple default general reprompt prompts in Baseline 820 and System 830 libraries, or relatively complex options where a developer can customize text in a prompt for specific instances of a Dialogue Module by selecting options or by providing the text as shown in Figure 16 ("wherein each catch style provides a different level of complexity with regard to preparing a system's audio response to be played at a dialog turn") (column 20, line 16 to column 21, line 8: Figures 8 and 16); thus, audio prompts are provided with at least two degrees of complexity;

"upon selection of a catch [style], preparing the system response for each catch [style]" – selecting an error recovery option allows a developer to customize the error recovery parameters within a Dialogue Module instance (column 20, lines 15 to 21: Figure 9); whether a developer selects a Dialogue Module with default parameters, or customizes a Dialogue Module, each configuration parameter causes a change in operation of the dialogue module when the interactive speech program executes (Abstract); implicitly, then, the interactive speech program "prepares the system response" in accordance with the parameters specified by the developer for each error condition ("catch").

Concerning independent claim 1, 30, and 39, the only elements not expressly disclosed by *Marx et al.* are the concepts of "style"-selection and "catch styles". *Marx et al.* discloses a plurality of default templates for error conditions when a user response is not understood, where an error condition is equivalent to a "catch", but omits the concept of a "style" in describing a "catch" and a process of selection. However, it is known in the art of voice services to provide style sheets to create interactive voice services. Specifically, *Zirngibl et al.* teaches a system and method for creation and automatic deployment of personalized dynamic and interactive voice services, where XML (extensible style sheet language) style sheets are provided to create voice services. An objective is to maximum an administrator's voice service building capability. (Column 11, Lines 32 to 49) It would have been obvious to one having ordinary skill in the art to apply a concept of "style" to selection of "catch styles" as

taught by *Zirngibl et al.* in a Dialogue Module selection method of *Marx et al.* for a purpose of maximizing an administrator's voice service building capability.

Concerning claims 2 and 31, *Marx et al.* discloses that a Dialogue Module may be customized by a developer to include content of prompts ("a new audio message to be played in response to a particular catch event") (column 20, lines 28 to 34: Figure 16); in one embodiment, a prompt can be specified by a filename, but a prompt may be specified by inputting text ("presenting one or more text fields for receiving a contextual message, the contextual message entered in each text field") if a text-to-speech synthesizer is used (column 18, lines 30 to 40; column 20, lines 58 to 63; column 21, lines 5 to 8).

Concerning claims 3 to 4 and 32 to 33, *Marx et al.* discloses that Dialogue Module templates may have a default initial prompt, but may require a custom initial prompt to be provided by a developer (column 18, lines 40 to 45); if a default prompt is used to an error condition, then the "contextual message is the same for each catch event"; however, if a prompt is customized for an error condition, then the "contextual message is different for each catch event".

Concerning claim 5, *Marx et al.* discloses that one of the Dialogue Module templates for error recovery involves replaying a prompt for a number of retries (column 13, lines 10 to 39: Figure 6: Step 640).

Concerning claims 6 and 34, *Marx et al.* discloses that Error Recovery 950 allows a developer to view and modify error recovery parameters (column 18, lines 1 to 3; column 20, lines 28 to 33: Figure 16).

Concerning claims 7 and 35, *Marx et al.* discloses an ItemList Module 520 can terminate on an ERROR condition 540, and take appropriate termination actions, including to transfer the caller to a live operator (column 9, lines 62 to 65: Figure 5: Step 540); an ItemList Module lets a developer define allowable responses to a caller prompt and return a termination condition ("identifying a final action to be taken") (column 15, line 66 to column 16, line 9); Error Recovery 950 allows a developer to view and modify error recovery parameters (column 18, lines 1 to 3; column 20, lines 28 to 33: Figure 16).

Concerning claims 8 to 10 and 36 to 38, *Marx et al.* discloses that a developer can customize at least a "timeout" parameter that sets a predetermined time period for the caller to respond after the output of a prompt (column 11, lines 7 to 16); thus, at least customizing a "timeout" period corresponds to "inserting variables in a contextual message"; moreover, a "timeout" parameter defines "pauses of specific duration values" in a message after the prompt, and can "enable acceleration of a system timeout" because a shorter "timeout" period corresponds to an acceleration of an error recovery procedure.

Response to Arguments

3. Applicants' arguments filed 11 March 2009 have been fully considered but they are not persuasive.

Firstly, Applicants argue that the rejection does not properly meet the standard for obviousness by establishing: (1) the scope and content of the prior art; (2) the level of skill in the art; (3) the differences between the claimed subject matter and the prior art; and (4) any objective indicia of obviousness.

However, it is maintained that the rejection does establish each of these four elements. The rejection sets forth element (1) because it discloses what is taught by *Marx et al.*, *i.e.,* a system and method of developing interactive speech applications for dialogues including a plurality of customized prompts of varying complexity for error recovery tasks when a response is not provided within a timeout period or a response is not understood. The rejection sets forth element (2) because it is stated to be known within the level of skill of the prior art to provide style sheets to create interactive voice services. The rejection sets forth element (3) because it is noted that *Marx et al.* does not expressly disclose the concept of selecting "styles" for "catch styles". And the rejection sets forth element (4) because it establishes that *Zirngibl et al.* teaches "style sheets" to create interactive voice services for an objective motivation of maximizing an administrator's voice service building capability.

Secondly, Applicants argue that *Marx et al.* does not disclose the limitation of "wherein each catch style provides a different level of complexity with regard to preparing a system's audio response to be played at a dialog turn.

However, *Marx et al.* does disclose that a system's audio response can be customized with at least two levels of complexity for dialogs involving error recovery. In one embodiment, *Marx et al.* discloses a retry method with a reprompt, which represents a relatively simple audio response, of repeating, "Please say your answer now", while a fallback method is a relatively more complex request for a user to spell his or her response. (Column 13, Lines 23 to 67: Figure 6: Steps 640a and 640b) Moreover, Error Recovery options include relatively simple default general reprompt prompts in Baseline 820 and System 830 libraries, or relatively complex options where a developer can customize text in a prompt for specific instances of a Dialogue Module by selecting text options or by providing the text as shown in Figure 16. (Column 20, Line 16 to Column 21, Line 8: Figures 8 and 16) Given that *Marx et al.* discloses default prompts, such as a general reprompt, "Please say your answer now", but that prompts can be customized by specifying text to be played by a text-to-speech synthesizer, or by creating new text for a prompt, then there are at least two levels of complexity for audio prompts in *Marx et al.*: relatively simple default prompts and relatively complex prompts with customized text. Compare Applicants' Specification, ¶[0022] - ¶[0025]: Figures 2 and 3, where a Simple Style treats all catch events in the same manner by just replaying an initial prompt – analogous to a general default prompt of *Marx et al.* –, and a Classic Style where text fields can be filled by the programmer with contextual

messages to be played in response to particular catch events – analogous to the customized text for specific instances of Dialogue Modules of *Marx et al.* Thus, *Marx et al.* meets the limitation of "wherein each catch style provides a different level of complexity with regard to preparing a system's audio response to be played at a dialog turn".

Thirdly, Applicants request, alternatively, that a constructive suggestion for claim amendment be provided in accordance with MPEP §706 II.

It is believed that the rejection is proper, but that the claims may be allowable if properly narrowed. Thus, the following suggested claim language is provided. Applicants can amend the claims to recite the specific properties of the three styles disclosed by their Specification, and by including "consisting of" language to limit coverage of "catch styles" to the three disclosed alternatives of Simple Style, Classic Style, and Modern Style: "wherein the catch styles are consisting of three catch styles of a simple style, a classic style, and a modern style, where a simple style treats all catch events in the same manner by replaying an initial prompt with no additional audio message, a classic style plays different audio messages tailored to each catch event through contextual messages created by a programmer, and a modern style that plays a first message and then plays a second message after a predetermined amount of time". No representation is made that the proposed amendment would necessarily render the claim allowable. Indeed, *Marx et al.* discloses many of the features of Applicants' Simple, Classic, and Modern Styles. However, by amending the independent claims to include "consisting of" language, and precisely defining the

characteristics of each of the three catch styles, then the limitations, taken as a whole, may distinguish over *Marx et al.*

Therefore, the rejection of claims 1 to 10 and 30 to 39 under 35 U.S.C. §103(a) as being unpatentable over *Marx et al.* in view of *Zirngibl et al.* is proper.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Eberle et al. ('953), Law et al, and Phillips et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN LERNER whose telephone number is (571)272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin Lerner/
Primary Examiner
Art Unit 2626
March 20, 2009